Remarks

Claims 1-43 are pending in the application and are presented for reconsideration. Claims 1, 3, 5, 8, 19, 21, 26 and 27 have been amended; Claims 2, 4, 6-8, 9-18, 20, 22-25, and 28-43 remain in the application unchanged.

No new matter has been added.

Claim Rejections

Claims 1-18 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1-8 and 19-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-18 are rejected under 112, second paragraph, as being incomplete for omitting essential elements.

Claims 1, 4, 5, 7-9, 19, 21-24, 26-30, and 35 are rejected under 35 U.S.C. § 102(b) as being anticipated by Gusterson (US Pat. No. 6,347,131 B1).

Claims 1-10, 12, 13, 19-31, and 33-36 are rejected under 35 U.S.C. § 102 as being anticipated by Heumann (U.S. Pat. No. 6,201,850 B1).

Claims 2, 10, 20, and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gusterson as applied to claims 19, 9, 19, and 30 above, and further in view of Snedecor and Cochran.

Claims 11 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gusterson as applied to claims 9 and 30 above.

Claims 14, 16, 37, 39, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gusterson as applied to claims 9, 11, 30, 32, and 35 above.

Claims 15 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Gusterson and Snedecor and Cochran as applied to claims 10 and 31 above.

Claims 11 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Heumann as applied to claims 9 and 30 above.

Claims 14-18 and 37-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Heumann

The Examiner's rejections of the claims are respectfully traversed.

I. Rejection of Claims Under 35 U.S.C. § 112, First Paragraph

Claims 1-18 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner states that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner states that Claims 1-18 claim a sensor that produces a raw measurement, yet claims 1-18 do not claim a radiation source. The Examiner states that the specification does not enable one skilled in the art to produce raw measurement without a radiation source.

The Applicant respectfully traverses the Examiner's characterization of what Applicant fairly enables. As described in the specification at page 31, line 25 through page 32, line 1, the "specific details of these systems are not critical to the practice of the present invention, which addresses a two-stage method for calibration of indirect measurement systems in general. For example, the number of computers and delegation of tasks to specific computers may vary considerably from system to system as may the specific details of the parameter of interest, the indirect sensor mechanism, etc. The present invention is applicable to any type of system which derives a parameter of interest from an indirect measurement (i.e., by measuring a different parameter and mapping the measured parameter to the parameter of interest), and *is not limited to AXI systems which have been described herein for purposes of illustration.*" Thus, while an x-ray inspection system was described in detail for purposes of illustration only, the principles of the invention as claimed in Applicant's Claims 1-

43 are not limited to utilizing an x-ray source, as suggested by the Examiner.

There is no requirement that, for a patent claim to be enabled, it must enable all embodiments of the invention. In particular, if an invention pertains to an art where the results are predictable, e.g., mechanical as opposed to chemical arts, a broad claim can be enabled by disclosure of a single embodiment. *Spectra-Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 3 USPQ2d 1737, 1743 (Fed. Cir.), *cert. denied*, 484 U.S. 954 (1987). In the present case, the invention pertains to calibrating an indirect measurement system, which is not particular to the source of measurement (e.g., an x-ray source) or a parameter being measured. The invention lies in how the indirect measurement system is calibrated rather than the operating function of the measurement system itself. Therefore, Claims 1-18 are properly formulated without addition of the specific source from which the raw measurement is generated.

The Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. § 112, first paragraph rejection.

II. Rejection of Claims Under 35 U.S.C. § 112, Second Paragraph

Claims 1-8 and 19-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner states that Claims 1-8 and 19-29 recite a correction function, a reference map, a correction function fitting procedure, a reference map function fitting procedure, and a classification function. The Examiner states that these do not constitute structural limitations because they are not associated with a computer, a processor, or a memory.

Claims 1, 3, 5, 8, 19, 21, 26 and 27 have been amended to recite structural limitations per the Examiner's suggestion.

Claims 1-18 are further rejected under §112, second paragraph, as being incomplete for omitting essential elements. Specifically, the Examiner states that the omitted elements are a radiation source since a sensor cannot produce a raw

measurement without a radiation source. As described above with respect to the response to the rejection of claims 1-18 under 35 U.S.C. § 112, first paragraph, the particular source from which a sensor generates a raw measurement is not particular to the invention. Accordingly, the Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. § 112, second paragraph rejection.

The Applicant respectfully submits that the rejection of the claims under 35 U.S.C. § 112, second paragraph are now overcome.

III. Rejections of Claims Under 35 U.S.C. § 102/103

1. Legal standard for Rejecting Claims Under 35 U.S.C. §102/103

Under 35 U.S.C. § 102, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628 (Fed. Cir.), *cert. denied*, 484 U.S. 827 (1987).

The standard for obviousness under 35 U.S.C. §103 is whether the claimed invention would have been obvious to those skilled in the art in light of the knowledge made available by the reference or references. In re Donovan and Ryan, 184 USPQ 414, 420, n. 3 (CCPA 1975). It requires consideration of the entirety of the disclosures of the references. In re Rinehart, 189 USPQ 143, 146 (CCPA 1976). All limitations of the claims must be considered. In re Boe, 184 USPQ 38, 40 (CCPA 1974). In making a determination as to obviousness, the references must be read without benefit of Appellants' teachings. In re Meng, 181 USPQ 94, 97 (CCPA 1974). In addition, the propriety of a 35 U.S.C. §103 rejection is to be determined by whether the reference teachings appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination, or other modifications. In re Lintner, 173 USPQ 560, 562 (CCPA 1972).

In order to combine references, the references must suggest the combination. In re Bond, 15 USPQ2d 1566, 1568 (CAFC 1990) ('Obviousness cannot be established by combining the teachings of the prior art to produce the

claimed invention, absent some teaching, suggestion or incentive supporting the combination.") (quoting Carella v. Starlight Archery and Pro Line 231 USPQ 644, 647 (CAFC 1986)). There is no suggestion to combine, however, if a reference teaches away from its combination with another source. *Tec Air Inc. v. Denso Manufacturing Michigan Inc.*, 52 USPQ2d 1294, 1298 (Fed. Cir. 1999) (*citing In re Fine* 837 F.2D 1071, 1074, 5 USPQ2d 1596, 1597 (Fed. Cir. 1988)); *See also Winner International Royalty Corp. v. Wang*, 53 USPQ2d 1580, 1587 (Fed. Cir. 2000) ("If [the cited reference] does in fact teach away from [Applicant's invention], then that finding alone can defeat [an] obviousness claim." (annotation added)). A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant . . . [or] if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994).

In addition, if when combined, the references "would produce a seemingly inoperative device," then they teach away from their combination. *Tec Air*, 52 USPQ2d at 1298 (citing *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (CCPA 1969)); *See also In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (finding no suggestion to modify a prior art device where the modification would render the device inoperable for its intended purpose).

The suggestion to combine references must have been in the prior art at the time Applicant's invention was made. W. L. Gore & Associates, Inc. v. Garlock, Inc., 220 USPQ 303, 312 (CAFC 1983), cert. denied, 469 U.S. 851 (1984). The mere absence from a reference of an explicit requirement of the claim cannot reasonably construed as an affirmative statement that the requirement is in the reference. *In re Evanega*, 829 F.2d 1110, 4 USPQ2d 1249 (Fed. Cir. 1987).

"The decisionmaker must view the prior art without reading into that art appellant's teachings. The issue, then, is whether the teachings of the prior art would, *in and of themselves and without the benefits of appellant's disclosure,* make the invention as a whole, obvious." In re Nomiya, Kohisa, and Matsumura, 184 USPQ 607 ,612 (CCPA 1975) (citations omitted) (quoting In re Sponnoble, 160 USPQ 237, 243 (CCPA 1969)).

2. Response to Rejections of Claims Under 35 U.S.C. § 102

a. Claims 1-4

Applicant's claim 1 recites:

> An indirect measurement system for determining an estimated value of a parameter of interest of an object, comprising:
> a sensor that produces a raw measurement that is indirectly representative of said parameter of interest of said object;
> a correction function that corrects said raw measurement to a corrected measurement to minimize measurement differences between said indirect measurement system and a reference indirect measurement system;
> a reference map function that estimates said estimated value of said parameter of interest of said object based on said corrected measurement; and
> a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system.

The Gusterson Reference

The Examiner cites Gusterson as anticipating claim 1. In particular, the Examiner states that Gusterson discloses an indirect measurement system for determining an estimated value of a parameter (volume) of interest of an object, comprising: a sensor (9) that produces a raw measurement that is indirectly representative of said parameter of interest of said object; a correction function that corrects said raw measurement to a corrected measurement (thickness) to

minimize measurement differences between said indirect measurement system and a reference indirect measurement system (a reference indirect measurement system is a system that indirectly measures a thickness of an object; col. 5, lines 13-20); a reference map function that estimates said estimated value of said parameter of interest of said object based on said corrected measurement (col. 5, lines 20-24); and a correction function fitting procedure (interpolation) that fits said correction function based on reference values for one or more calibration samples (test blocks) measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system (col. 6, lines 3-45).

Gusterson does not teach "a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system" as recited in Applicant's claim 1. In Gusterson, the analog outputs from the linear array (9) of photodiodes (10) may be considered the raw measurement from the sensors. Each photodiode 10 provides an analog signal over a period of time to a control unit 9a, wherein an integration circuit adds the signals cumulatively, and stores an analog signal for each photodiode 10 indicative of the radiation dose striking the corresponding part of the phosphorescent strip 8 during that time period. Temperature information from a temperature sensing element 11 is used to correct the outputs of the photodiodes 10 for variations of their performance with temperature. (Gusterson, col. 4, lines 29-50). Thus, the control unit 9a performs a "correction function" that corrects the raw measurement (i.e., the analog output generated by the photodiode 10) to a corrected measurement , which are stoed in a buffer RAM 44. Thus, what is stored in the buffer RAM 44 may be considered the "corrected measurement". A processor 50 processes each line of corrected measurements stored in buffer RAM 44 and operates on the line to derive a value corresponding to the "thickness" of the product at a point corresponding to each of the diode positions.

Thus, the processor 50 performs a mapping function to map corrected measurement to a parameter of interest (i.e., "thickness").

The Examiner seeks to equate the mapping function performed by processor 50 with Applicant's recited "correction function". However, a correction function merely corrects - it does not transform one parameter to a different parameter. In Gusterson, the analog output generated by a photodiode 10 is "corrected" by a control unit 9a to a corrected analog output value based on the temperature received by the temperature controller 11. Thus, the control unit 9a performs a "correction function". However, also in Gusterson, the processor transforms a corrected analog output (stored in buffer RAM 44) into a different parameter - in this case "thickness". Because it transforms the analog output parameter into an entirely different parameter type, the function performed by the processor 50 is *not* a "correction function" as recited in Applicant's Claim 1; rather the function performed by the processor 50 is a "transformation function" and at most it could be considered a "mapping function".

While upon first reading it may appear that we are splitting hairs as to which function is performing correction and which function is performing mapping. However, the Applicant now directs the Examiner's attention to the limitation "a correction function fitting procedure that fits said *correction function* based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system" of Applicant's Claim 1. Gusterson does not teach this limitation.

The Examiner seeks to equate Gusterson's "calibration function" (Gusterson, col. 5, lines 25-34; col. 6, lines 3-45) with Applicant's recited "correction function fitting procedure". In the "calibration function", Gusterson derives a correlation between the output of each diode and the "thickness" of the product at a point corresponding to the position of that diode. Gusterson does this by first recording the diode output when the irradiation zone 7 is clear of obstructions, and then placing one or more calibration blocks of known thickness

and transmissivity to X-radiation between the source and the diodes, and noting the output of each diode for each block. The process described is merely "calibration" - that is, generating pairs of reference values and corresponding actual measured values - which cannot be equated with Applicant's recited "correction function fitting procedure that *fits said correction function* based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system".

First, Gusterson does not teach or suggest fitting the correction function - i.e., fitting the function performed by the individual control units 9a to correct the analog signal generated by the respective photodiode to a corrected analog signal based on the temperature data received by the temperature controller 11. Instead, the output of the calibration process is used by the processor 50 to derive a value corresponding to the thickness of the product based on the correlations derived by the calibration process of FIG. 5. Thus, the output of the calibration process is used by a "mapping function" and not the "correction function" as recited in Applicant's Claim 1.

Second, Gusterson does not teach or suggest that the calibration function fits *any* element "based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system". To put it more simply, Applicant's Claim 1 requires a fitting function that fits a correction function based on corresponding pairs of reference values (from a reference indirect measurement system) and associated actual value measured on the indirect measurement system. Nothing in Gusterson is being fit based on the calibration pairs of test block values and actual measured values. These pairs are only being used by the mapping function (performed by processor 50) to *classify* the corrected analog outputs of the photodiodes. Thus, even if the mapping function performed by processor 50 were, for argument sake only, to be considered a "correction function", it would still not be correctively fit "based on

reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system". To reiterate, knowledge of the test block calibration pairs (reference value and corresponding measured value) is used only for classification of actual measured values and not for any corrective fitting of any correction function or even mapping function.

Accordingly, Gusterson does not teach or suggest the limitation "a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system" as recited in Applicant's Claim 1.

Since Gusterson does not meet each and every limitation of Applicant's claim 1, per *Verdegaal Bros., Inc., supra*, Gusterson cannot be used in formulating an anticipation rejection under 35 U.S.C. § 102.

The Heumann Reference

The Examiner cites Heumann as anticipating claim 1. In particular, the Examiner seeks to equate the fitting procedure of Heumann, as described at col. 28, line 28 through col. 29, lien 21, with Applicant's recited "a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system".

However, as described in Applicant's Specification at page 26, line 28 through page 27, line 22, the "procedure involves fitting multiple sets of calibration data to hyperbolic functions of the form:

$$y = \Delta G = \sqrt{(x-a)^2 + b^2} + c \qquad (3)$$

where *a* is the common (non-physical) x-axis value at which each hyperbola has a minimum value, and all of the hyperbolae share a common *x*-

axis intercept at $x_0 = a - \sqrt{c^2 - b^2}$. Here, *y* represents the delta-gray level values, *x* represents the background gray level, and each hyberbola corresponds to a particular solder thickness. Once a set of calibration curves are fitted to the sample data, these curves are used as the reference map $f(M_C)$ to map measured gray values to solder thickness during normal operation of the AXI system." Thus, the fitting procedure in Heumann is used not to fit a "corrective function", as required by Applicant's Claim 1, but rather to operate as one embodiment for the "reference map function" (also recited in Applicant's Claim 1). Thus, while Heumann teaches "reference map function that estimates said estimated value of said parameter of interest of said object based on said corrected measurement", Heumann does not teach or suggest "a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said reference indirect measurement system and corresponding values measured on said indirect measurement system" as recited in Applicant's Claim 1.

Since Heumann does not meet each and every limitation of Applicant's claim 1, per *Verdegaal Bros., Inc., supra*, Heumann cannot be used in formulating an anticipation rejection under 35 U.S.C. § 102.

The Snedecor and Cochran Reference

Snedecor and Cochran does not make up for the deficiencies of Gusterson and Heumann in meeting Applicant's Claim 1. Specifically, there is nothing in the Snedecor and Cochran reference that teaches or suggest "" as missing from both the Gusterson reference and the Heumann reference.

Accordingly, Gusterson, Heumann, and Snedecor and Cochran cannot even be combined to formulate an obvious-type rejection under 35 U.S.C. § 103. Accordingly, Applicant respectfully submits that the 35 U.S.C. § 102 rejection of claim 1 should be withdrawn and that claim 1 is now in position for allowance.

Claims 2-4 each depend from independent base claim 1 and add further limitations. For at least the same reasons that Claim 1 is not shown, taught, or

disclosed by the cited references, Claims 2-4 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 2-4 should be withdrawn.

b. Claims 5-8

Claim 5 recites similar limitations to claim 1, including "a correction function fitting procedure that fits said correction function based on reference values for one or more calibration samples measured on or simulated for said second indirect measurement system and corresponding values measured on said first indirect measurement system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 1 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 1 should be withdrawn.

Claims 6-8 each depend from independent base claim 5 and add further limitations. For at least the same reasons that Claim 5 is not shown, taught, or disclosed by the cited references, Claims 6-8 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 6-8 should be withdrawn.

c. Claims 9-13

Claim 9 recites similar limitations to claim 1, including "a correction function that corrects said raw measurement to a corrected measurement to minimize measurement differences between said first indirect measurement system and said second indirect measurement system " and "fitting said correction function based on said obtained measurement values of said one or more calibration samples and corresponding known reference values measured on or simulated for said second indirect measurement system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 9 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 9 should be withdrawn.

Claims 10-13 each depend from independent base claim 9 and add further limitations. For at least the same reasons that Claim 9 is not shown, taught, or

disclosed by the cited references, Claims 10-13 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 10-13 should be withdrawn.

d. Claims 14-18

Claim 14 recites similar limitations to claim 1, including "a correction function that corrects said raw measurement to a corrected measurement to minimize measurement differences between said first indirect measurement system and said second indirect measurement system " and "fitting said correction function based on said obtained measurement values of said one or more calibration samples and corresponding known reference values measured on or simulated for said second indirect measurement system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 14 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 14 should be withdrawn.

Claims 15-18 each depend from independent base claim 14 and add further limitations. For at least the same reasons that Claim 14 is not shown, taught, or disclosed by the cited references, Claims 15-18 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 15-18 should be withdrawn.

e. Claims 19-23

Claim 19 recites similar limitations to claim 1, including "a correction function fitting procedure that fits said correction function based on one or more features derived from one or more images of one or more calibration samples imaged on said automated inspection system and corresponding reference features derived from one or more reference images imaged on said reference automated inspection system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 19 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 19 should be withdrawn.

Claims 20-23 each depend from independent base claim 19 and add further limitations. For at least the same reasons that Claim 19 is not shown, taught, or disclosed by the cited references, Claims 20-23 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 10-13 should be withdrawn.

f. Claims 24-29

Claim 24 recites similar limitations to claim 1, including "a correction function fitting procedure that fits said correction function based on one or more features derived from one or more images of one or more calibration samples imaged on said first automated inspection system and corresponding reference features derived from one or more reference images imaged on said second automated inspection system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 24 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 14 should be withdrawn.

Claims 25-29 each depend from independent base claim 24 and add further limitations. For at least the same reasons that Claim 24 is not shown, taught, or disclosed by the cited references, Claims 25-29 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 25-29 should be withdrawn.

g. Claims 30-36

Claim 30 recites similar limitations to claim 1, including "fitting said correction function based on said one or more features derived from said one or more images of said one or more calibration samples and corresponding reference features derived from one or more reference images imaged on said second automated inspection system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 30 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 30 should be withdrawn.

Claims 31-36 each depend from independent base claim 30 and add further limitations. For at least the same reasons that Claim 30 is not shown, taught, or disclosed by the cited references, Claims 31-36 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 31-36 should be withdrawn.

h. Claims 37-43

Claim 37 recites similar limitations to claim 1, including "fitting said correction function based on said one or more features derived from said one or more images of said one or more calibration samples and corresponding reference features derived from one or more reference images imaged on said second automated inspection system". For at least the same reasons that Claim 1 is not shown, taught, or disclosed by the cited references, Claim 37 is likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of Claim 37 should be withdrawn.

Claims 38-43 each depend from independent base claim 37 and add further limitations. For at least the same reasons that Claim 37 is not shown, taught, or disclosed by the cited references, Claims 38-43 are likewise not shown, taught, or disclosed. Thus, Applicant respectfully submits that the rejection of claims 38-43 should be withdrawn.

Conclusion

In view of the foregoing remarks, it is respectfully submitted that none of the references cited by the Examiner taken alone or in any combination shows, teaches, or discloses the claimed invention, and that Claims 1-43 are in condition for allowance. Reexamination and reconsideration are respectfully requested.

Should the Examiner have any questions regarding this amendment, or should the Examiner believe that it would further prosecution of this application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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May 1, 2006

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